

# The South Australian Naturalist.

Vol. XII.

ADELAIDE, MAY, 1931.

No. 3.

## CUTTLEBONES FROM ROBE WITH DESCRIPTION OF A NEW SPECIES.

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Although most of our common species of Mollusca are known to Conchologists, very few are aware that at least six species of cuttlebones occur on our open beaches. The chalky thickening of the "bone" is used in the manufacture of dentifrice, for taking impressions of objects, and as a beak sharpener for caged birds. It will surprise most people to know that crushed cuttlebone has proved highly satisfactory for packing fruit.

During a recent visit to Robe, a special effort was made to obtain a comprehensive collection of these "shells" of the cuttlefish. Six species representing five genera were obtained. Of these, *Decorisepia jaenschi* is new to science. The only specimen of *Glyptosepia hedleyi* Berry hitherto taken in South Australia, is a fragmentary one in the collection of Stillman Berry of California. *Mesembrisepia chirotrema* Berry is very rare, Mr. Kimber having supplied the only two specimens in the museum collection taken in South Australia.

The terms used in describing a cuttlebone, or sepion as it is scientifically called, are explained in the accompanying diagram, Figure 1.

The five genera found in South Australia may be distinguished by the following key.

- a. Spine not ventrally keeled.
  - b. Inner cone well developed.
    - c. Inner cone produced as a glaze, spine eroded away in the adult ... .. *Amplisepia.*
    - cc. Inner cone not produced as a glaze, but sharply defined, spine not eroded in the adult  
..... *Mesembrisepia.*
  - bb. Inner cone obsolete.
    - d. Sepion over five times as long as wide ....  
..... *Arctosepia.*
    - dd. Sepion less than three times as long as wide  
..... *Decorisepia.*
- aa. Spine ventrally keeled ... .. *Glyptosepia.*

*Amplisepia apama*. GRAY. Figure 2.

Seption large, elongate oval; spine eroded away in the adult, small and delicate in the juvenile; dorsum pustulose, cream coloured; venter swollen orally; striae close, ventral sulcus shallow; outer cone thick, calcareous; inner cone not sharply defined, appearing as an elongate glaze.

Type. Port Adelaide.

Specimen illustrated. 280 x 100 mm.

The largest and most common South Australian Species.

*Mesembrisepia*. Iredale.

Two species of this genus occur and may be distinguished by the following key.

a. Dorsal surface weakly pustulose, dorsal rib weakly defined; ventral sulcus shallow .... *novae-hollandiae*.

aa. Dorsal surface coarsely pustulose, dorsal rib defined by two deep lateral furrows; ventral sulcus deep .... *chirotrema*.

*Mesembrisepia novae-hollandiae*. HOYLE. Figure 3.

Seption of medium size, elongate oval; spine strong, rounded, dorsally oblique, mounted on a callous ridge; dorsum pink, pustulose; venter swollen orally, striae close, wavy, ventral sulcus shallow; outer cone calcareous; inner cone well developed; sharply defined.

Type. Kangaroo Island.

Specimen illustrated. 140 x 50 mm.

Very variable. A wide form obtained at Robe is probably the seption of the female, which is wider across the outer cone and more excavate ventrally.

*Mesembrisepia chirotrema*. BERRY. Figure 4.

Seption larger than in the preceding species; elongate oval, spine very strong, dorsally oblique, mounted on a callous ridge; dorsum cream, coarsely pustulose all over, central rib defined by two lateral furrows; venter swollen orally, striae close, wavy, ventral sulcus deep; outer cone thickly calcareous; inner cone well developed, sharply defined.

Type. Kangaroo Island.

Specimen illustrated. 160 x 42 mm.

Probably the deep water representative of *M. novae-hollandiae*. Four specimens were taken.

*Arctosepia braggi*. VERCO. Figure 9.

Sepion small, narrow, elongate, spine long, rounded; dorsum pink, smooth, central rib indistinct; venter swollen orally, striae close, regular, sulcus a mere linear depression; outer cone narrow, chitinous; inner cone obsolete.

Type. Gulf St. Vincent.

Specimen illustrated. 70 x 11 m.m.

The smallest of our species. Fairly common.

*Decorisepia jaenschii*. *sp. n.* Figures 5 and 6.

Sepion of medium size, elongate oval, pointed orally; spine strong, round; dorsum pink, finely pustulose, though apparently smooth to the naked eye, central rib narrow, defined by two lateral furrows; venter, slightly swollen orally, striae close, no ventral sulcus; outer cone thin but little calcified; inner cone obsolete.

Type. Robe.

Specimen illustrated. (Type) 103.5mm. long, 37 mm. wide, 8.7 mm. thick.

South Australian Museum. D.10163.

The author first found this species at Port Fairy, Victoria, noting in M.S.S. that it was apparently a novelty. Interest was revived by the discovery of a dozen specimens at Robe. Named after Mr. F. Jaensch, my companion of the trip.

*Glyptosepia hedleyi*. BERRY. Figures 7 and 8.

Sepion of medium size, elongate oval, pointed and laterally concave orally; spine long, ventrally keeled; dorsum cream, very finely pustulose, apparently smooth to the naked eye, central rib indistinct; venter slightly swollen orally, striae close, regular, no sulcus; outer cone thin, narrow; inner cone obsolete. Figure 7 gives an enlarged lateral view of the spine.

Type. South of Kangaroo Island.

Specimen illustrated. 44 x 15 mm.

A dozen specimens were obtained.

## SHELL COLLECTORS CLUB.

Interest is well maintained. The members have been very pleased to learn of the improvement in health of the Chairman, Mr. W. J. Kimber, and look forward to his presence again at the meetings.

Acknowledgment is here made, with great appreciation, of the kind assistance rendered by Mr. T. Iredale, of the Australian Museum, Sydney, in identifying shells and revising portions of our list.

Thanks are also due to Mr. B. C. Cotton, of the South Australian Museum for his valuable aid in the identification of specimens.

In the following notes of shells reviewed at the meetings during the quarter, economy of space has been considered, and it is suggested that the description of the species be read together with the remarks on the genus and family.

The numbers on the extreme right refer to Sir J. C. Verco's Catalogue of Marine Mollusca of South Australia, 1908.

Miss J. M. Murray has again ably illustrated the shells.

### Family GALERIDÆ=*Calyptraeidae*.

A cosmopolitan group with patelliform or dish-shaped shells, whose summits are more or less spiral, the interior polished and porcellanous, and chambered by a basal plate, variously shaped. They adhere to stones or other shells and appear never to quit the spot on which they first settle, as the margins of the shells become adapted to the irregularities of the surface beneath. Form and colour depend upon the situation. Those inside dead shells are generally flat or concave above and colourless; those on the outside of shells are convex and coloured. The animals sometimes hatch their spawn under the forepart of the foot. The beach student will obtain *Sigapatella calyptraeformis* Lamarck and the Slipper Limpet, *Zeacrypta immersa* Angas without much difficulty, attached to *Pinnae* and other shells which are cast up during rough weather. *Zegalerus hedleyi* Smith is much more uncommon under similar conditions.

### Genus SIGAPATELLA Lesson, 1830.

*S. Calyptraeformis* Lamarck, 1822. Fig. 1. 306.

Shell thin, patelliform, roundly oval, spiral, with a purplish lateral apex well behind the centre; growth lines well marked; colour greenish yellow to light brown; periostracum thick, horny, ragged; whorls 3-4, the last very large; interior white tinged with